Exhibit B
BLAST of SEQ ID NO:23 versus Human genome


```
MEGABLAST 1.2.3-Paracel [2001-11-20]
```
Reference:
```
Zheng Zhang, Scott Schwartz, Lukas Wagner, and Webb Miller (2000),
"A greedy algorithm for aligning DNA sequences",
J Comput Biol 2000; 7(1-2):203-14.
Database: Homo_sapiens.latestgp.masked.fa
          44,521 sequences; 200,768,834,160 total letters
Query= seqid23
        (3660 letters)
```

```
                                                              Score      E
Sequences producing significant alignments:                  (bits)  Value

AC007600.5.1.183083                                            505    e-140
AC096996.1.1.194627                                            454    e-124


>AC007600.5.1.183083
            Length = 183083

 Score =  505 bits (255), Expect = e-140
 Identities = 255/255 (100%)
 Strand = Plus / Plus



Query: 1355   agaagttttctcctccaggagagccctgttttctatgtccagacattacaagacccccagca 1414
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 46566  agaagttttctcctccaggagagccctgttttctatgtccagacattacaagacccccagca 46625


Query: 1415   aagctctggtctttgaggaggccaccttgtcatggcaacagacctgtcccgggatcgtca 1474
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 46626  aagctctggtctttgaggaggccaccttgtcatggcaacagacctgtcccgggatcgtca 46685


Query: 1475   atggggcactggagctggagaggaacgggcatgcttctgaggggatgaccaggcctagag 1534
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 46686  atggggcactggagctggagaggaacgggcatgcttctgaggggatgaccaggcctagag 46745


Query: 1535   atgccctcgggccagaggaagaagggaacagcctgggcccagagttgcacaagatcaacc 1594
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 46746  atgccctcgggccagaggaagaagggaacagcctgggcccagagttgcacaagatcaacc 46805


Query: 1595   tggtggtgtccaagg 1609
              |||||||||||||||
Sbjct: 46806  tggtggtgtccaagg 46820



 Score =  458 bits (231), Expect = e-125
 Identities = 234/235 (99%)
 Strand = Plus / Plus


Query: 544    atattgattataccaaagatcctggaatattcagaagagcagttggggaatgttgtccat 603
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 34936  atattgattataccaaagatcctggaatattcagaagagcagttggggaatgttgtccat 34995


Query: 604    ggagtgggactctgctttgccctttttctctccgaatgtgtgaagtctctgagtttctcc 663
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Sbjct: 34996  ggagtgggactctgctttgccctttttctctccgaatgtgtgaagtctctgagtttctcc  35055


Query: 664   tccagttggatcatcaaccaacgcacagccatcaggttccaagcagctgtttcctccttt  723
             |||||||||||||||||||||||||||||||||||||||| |||||||||||||||||||||
Sbjct: 35056 tccagttggatcatcaaccaacgcacagccatcaggttccgagcagctgtttcctccttt  35115


Query: 724   gcctttgagaagctcatccaatttaagtctgtaatacacatcacctcaggagagg  778
             |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 35116 gcctttgagaagctcatccaatttaagtctgtaatacacatcacctcaggagagg  35170




 Score =  454 bits (229), Expect = e-124
 Identities = 229/229 (100%)
 Strand = Plus / Plus


Query: 2217  ggttttccgctgccccatgagtttctttgacaccatcccaataggccggcttttgaactg  2276
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 70337 ggttttccgctgccccatgagtttctttgacaccatcccaataggccggcttttgaactg  70396


Query: 2277  cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct  2336
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 70397 cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct  70456


Query: 2337  ggtcctgtccttaatggtgatcgccgtcctgttgattgtcagtgtgctgtctccatatat  2396
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 70457 ggtcctgtccttaatggtgatcgccgtcctgttgattgtcagtgtgctgtctccatatat  70516


Query: 2397  cctgttaatgggagccataatcatggttatttgcttcatttattatatg  2445
             |||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 70517 cctgttaatgggagccataatcatggttatttgcttcatttattatatg  70565




 Score =  408 bits (206), Expect = e-110
 Identities = 206/206 (100%)
 Strand = Plus / Plus


Query: 1877  agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc  1936
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 57285 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc  57344


Query: 1937  gcgccgtctattccgaccgtcagatctacctgctggacgaccccctgtctgctgtggacg  1996
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 57345 gcgccgtctattccgaccgtcagatctacctgctggacgaccccctgtctgctgtggacg  57404


Query: 1997  cccacgtggggaagcacatttttgaggagtgcattaagaagacactcaggggggaagacgg  2056
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 57405 cccacgtggggaagcacatttttgaggagtgcattaagaagacactcaggggggaagacgg  57464


Query: 2057  tcgtcctggtgacccaccagctgcag  2082
             ||||||||||||||||||||||||||
Sbjct: 57465 tcgtcctggtgacccaccagctgcag  57490




 Score =  385 bits (194), Expect = e-103
 Identities = 194/194 (100%)
```

Strand = Plus / Plus

```
Query:  2857  aagatgtgtgtctcggaagctcctttacacatggaaggcacaagttgtccccagggggtgg  2916
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 80649  aagatgtgtgtctcggaagctcctttacacatggaaggcacaagttgtccccagggggtgg  80708


Query:  2917  ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc  2976
              |.||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 80709  ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc  80768


Query:  2977  accgtgcttcacggcatcaacctgaccatccgcggccacgaagtggtgggcatcgtggga  3036
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 80769  accgtgcttcacggcatcaacctgaccatccgcggccacgaagtggtgggcatcgtggga  80828


Query:  3037  aggacgggctctgg  3050
              ||||||||||||||
Sbjct: 80829  aggacgggctctgg  80842
```

  Score = 371 bits (187), Expect = 2e-99
  Identities = 187/187 (100%)
  Strand = Plus / Plus

```
Query:  2583  gtttaagaggctgactgatgcgcagaataactacctgctgttgtttctatcttccacacg  2642
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 73139  gtttaagaggctgactgatgcgcagaataactacctgctgttgtttctatcttccacacg  73198


Query:  2643  atggatggcattgaggctggagatcatgaccaaccttgtgaccttggctgttgccctgtt  2702
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 73199  atggatggcattgaggctggagatcatgaccaaccttgtgaccttggctgttgccctgtt  73258


Query:  2703  cgtggcttttggcatttcctccaccccctactcctttaaagtcatggctgtcaacatcgt  2762
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 73259  cgtggcttttggcatttcctccaccccctactcctttaaagtcatggctgtcaacatcgt  73318


Query:  2763  gctgcag  2769
              |||||||
Sbjct: 73319  gctgcag  73325
```

  Score = 347 bits (175), Expect = 3e-92
  Identities = 178/179 (99%)
  Strand = Plus / Plus

```
Query:   776  aggccatcagcttcttcaccggtgatgtaaactacctgtttgaaggggtgtgctatggac  835
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 41478  aggccatcagcttcttcaccggtgatgtaaactacctgtttgaaggggtgtgctatggac  41537


Query:   836  ccctagtactgatcacctgcgcatcgctggtcatctgcagcatttcttcctacttcatta  895
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 41538  ccctagtactgatcacctgcgcatcgctggtcatctgcagcatttcttcctacttcatta  41597


Query:   896  ttggatacactgcatttattgccatcttatgctatctcctggttttcccactggaggta  954
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||| ||||
Sbjct: 41598  ttggatacactgcatttattgccatcttatgctatctcctggttttcccactggcggta  41656
```

```
Score =   337 bits (170), Expect = 3e-89
Identities = 170/170 (100%)
Strand = Plus / Plus


Query: 3401   agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 3460
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 90103  agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 90162


Query: 3461   agcgcacaatccgtgaagccttccagggctgcaccgtgctcgtcattgcccaccgtgtca 3520
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 90163  agcgcacaatccgtgaagccttccagggctgcaccgtgctcgtcattgcccaccgtgtca 90222


Query: 3521   ccactgtgctgaactgtgaccacatcctggttatgggcaatgggaaggtg 3570
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 90223  ccactgtgctgaactgtgaccacatcctggttatgggcaatgggaaggtg 90272



 Score =   321 bits (162), Expect = 2e-84
 Identities = 162/162 (100%)
 Strand = Plus / Plus


Query: 235    aggtttcctgccccccagcccctggacaatgctggcctgttctcctacctcaccgtgtca 294
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 29801  aggtttcctgccccccagcccctggacaatgctggcctgttctcctacctcaccgtgtca 29860


Query: 295    tggctcacccccgctcatgatccaaagcttacggagtcgcttagatgagaacaccatccct 354
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 29861  tggctcacccccgctcatgatccaaagcttacggagtcgcttagatgagaacaccatccct 29920


Query: 355    ccactgtcagtccatgatgcctcagacaaaaatgtccaaagg 396
              ||||||||||||||||||||||||||||||||||||||||||
Sbjct: 29921  ccactgtcagtccatgatgcctcagacaaaaatgtccaaagg 29962



 Score =   319 bits (161), Expect = 7e-84
 Identities = 161/161 (100%)
 Strand = Plus / Plus


Query: 3049   gggaagtcctccttgggcatggctctcttccgcctggtggagcccatggcaggccggatt 3108
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82347  gggaagtcctccttgggcatggctctcttccgcctggtggagcccatggcaggccggatt 82406


Query: 3109   ctcattgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 3168
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 82407  ctcattgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 82466


Query: 3169   gtgatccctcaagatccagtgctgctctcaggaaccatcag 3209
              |||||||||||||||||||||||||||||||||||||||||
Sbjct: 82467  gtgatccctcaagatccagtgctgctctcaggaaccatcag 82507



 Score =   299 bits (151), Expect = 6e-78
 Identities = 151/151 (100%)
```

Strand = Plus / Plus

Query: 393   aaggcttcaccgcctttgggaagaagaagtctcaaggcgagggattgaaaaagcttcagt 452
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 33335 aaggcttcaccgcctttgggaagaagaagtctcaaggcgagggattgaaaaagcttcagt 33394

Query: 453   gcttctggtgatgctgaggttccagagaacaaggttgattttcgatgcacttctgggcat 512
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 33395 gcttctggtgatgctgaggttccagagaacaaggttgattttcgatgcacttctgggcat 33454

Query: 513   ctgcttctgcattgccagtgtactcgggcca 543
              |||||||||||||||||||||||||||||||
Sbjct: 33455 ctgcttctgcattgccagtgtactcgggcca 33485

 Score = 297 bits (150), Expect = 3e-77
 Identities = 150/150 (100%)
 Strand = Plus / Plus

Query: 950   aggtattcatgacaagaatggctgtgaaggctcagcatcacacatctgaggtcagcgacc 1009
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 42421 aggtattcatgacaagaatggctgtgaaggctcagcatcacacatctgaggtcagcgacc 42480

Query: 1010   agcgcatccgtgtgaccagtgaagttctcacttgcattaagctgattaaaatgtacacat 1069
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 42481 agcgcatccgtgtgaccagtgaagttctcacttgcattaagctgattaaaatgtacacat 42540

Query: 1070   gggagaaaccatttgcaaaaatcattgaag 1099
              ||||||||||||||||||||||||||||||
Sbjct: 42541 gggagaaaccatttgcaaaaatcattgaag 42570

 Score = 293 bits (148), Expect = 4e-76
 Identities = 151/152 (99%)
 Strand = Plus / Plus

Query: 1098   agacctaagaaggaaggaaaggaagctattggagaagtgcgggcttgtccagagcctgac 1157
              |||||||||||||||||||||||||||| |||||||||||||||||||||||||||||||
Sbjct: 42736 agacctaagaaggaaggaaaggaaactattggagaagtgcgggcttgtccagagcctgac 42795

Query: 1158   aagtataaccttgttcatcatccccacagtggccacagcggtctgggttctcatccacac 1217
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 42796 aagtataaccttgttcatcatccccacagtggccacagcggtctgggttctcatccacac 42855

Query: 1218   atccttaaagctgaaactcacagcgtcaatgg 1249
              ||||||||||||||||||||||||||||||||
Sbjct: 42856 atccttaaagctgaaactcacagcgtcaatgg 42887

 Score = 289 bits (146), Expect = 6e-75
 Identities = 188/202 (93%)
 Strand = Plus / Plus

Query: 1877   agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 1936
              |||||||| |||||||||||||||||||||||||||||||||| ||||||| |||||||||

```
Sbjct: 142145 agattgggggagcggggcctcaacctctctggggggcagaggcagaggattagcctggccc 142204


Query: 1937    gcgccgtctattccgaccgtcagatctacctgctggacgaccccctgtctgctgtggacg 1996
               ||||  |||||| ||||||||||||| |||||||||||||||||||||||||| || |||||||
Sbjct: 142205 gcgctgtctactccgaccgtcagctctacctgctggacgacccccgtcggccgtggacg 142264


Query: 1997    cccacgtggggaagcacattttttgaggagtgcattaagaagacactcaggggggaagacgg 2056
               ||||||||||||||||| | |||||||||||||||||||||||||| ||||||||| ||||| |
Sbjct: 142265 cccacgtggggaagcacgtctttgaggagtgcattaagaagacgctcaggggaaagacag 142324


Query: 2057    tcgtcctggtgacccaccagct 2078
               ||||||||||||||||||||||
Sbjct: 142325 tcgtcctggtgacccaccagct 142346



 Score =  278 bits (140), Expect = 2e-71
 Identities = 140/140 (100%)
 Strand = Plus / Plus


Query: 2445    gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 2504
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 70675  gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 70734


Query: 2505    attctcccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 2564
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 70735  attctcccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 70794


Query: 2565    tgaagacttcatcagccagt 2584
               ||||||||||||||||||||
Sbjct: 70795  tgaagacttcatcagccagt 70814



 Score =  278 bits (140), Expect = 2e-71
 Identities = 140/140 (100%)
 Strand = Plus / Plus


Query: 2080    cagtacttagaattttgtggccagatcattttgttggaaaatgggaaaatctgtgaaaat 2139
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 59486  cagtacttagaattttgtggccagatcattttgttggaaaatgggaaaatctgtgaaaat 59545


Query: 2140.   ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 2199
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 59546  ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 59605


Query: 2200    cacaaggaagccacttcggt 2219
               ||||||||||||||||||||
Sbjct: 59606  cacaaggaagccacttcggt 59625



 Score =  276 bits (139), Expect = 9e-71
 Identities = 139/139 (100%)
 Strand = Plus / Plus


Query: 100     aaaacctatactctccaagatggcccctggagtcagcaagagagaaatcctgaggctcca 159
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Sbjct: 27194 aaaacctatactctccaagatggcccctggagtcagcaagagagaaatcctgaggctcca 27253


Query: 160    gggagggcagctgtcccaccgtggggggaagtatgatgctgccttgagaaccatgattccc 219
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 27254 gggagggcagctgtcccaccgtggggggaagtatgatgctgccttgagaaccatgattccc 27313


Query: 220    ttccgtcccaagccgaggt 238
              |||||||||||||||||||
Sbjct: 27314 ttccgtcccaagccgaggt 27332



 Score =  252 bits (127), Expect = 1e-63
 Identities = 127/127 (100%)
 Strand = Plus / Plus


Query: 1679   agatgcacttgctcgagggctcggtggggggtgcagggaagcctggcctatgtcccccagc 1738
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 52228  agatgcacttgctcgagggctcggtggggggtgcagggaagcctggcctatgtcccccagc 52287


Query: 1739   aggcctggatcgtcagcgggaacatcagggagaacatcctcatgggaggcgcatatgaca 1798
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 52288  aggcctggatcgtcagcgggaacatcagggagaacatcctcatgggaggcgcatatgaca 52347


Query: 1799   aggcccg 1805
              |||||||
Sbjct: 52348  aggcccg 52354



 Score =  226 bits (114), Expect = 8e-56
 Identities = 114/114 (100%)
 Strand = Plus / Plus


Query: 3289   atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 3348
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 87547  atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 87606


Query: 3349   gtgggggagaggcagctgctctgcattgccagggctgtgcttcgcaactccaag 3402
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 87607  gtgggggagaggcagctgctctgcattgccagggctgtgcttcgcaactccaag 87660



 Score =  216 bits (109), Expect = 7e-53
 Identities = 109/109 (100%)
 Strand = Plus / Plus


Query: 1248   ggccttcagcatgctggcctccttgaatctccttcggctgtcagtgttctttgtgcctat 1307
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 44216  ggccttcagcatgctggcctccttgaatctccttcggctgtcagtgttctttgtgcctat 44275


Query: 1308   tgcagtcaaaggtctcacgaattccaagtctgcagtgatgaggttcaag 1356
              |||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 44276  tgcagtcaaaggtctcacgaattccaagtctgcagtgatgaggttcaag 44324



 Score =  196 bits (99), Expect = 7e-47
```

Identities = 99/99 (100%)
Strand = Plus / Plus

Query: 1   atgactaggaagaggacatactgggtgcccaactcttctggtggcctcgtgaatcgtggc 60
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 25846 atgactaggaagaggacatactgggtgcccaactcttctggtggcctcgtgaatcgtggc 25905

Query: 61   atcgacataggcgatgacatggtttcaggacttatttat 99
              |||||||||||||||||||||||||||||||||||||||
Sbjct: 25906 atcgacataggcgatgacatggtttcaggacttatttat 25944

 Score = 188 bits (95), Expect = 2e-44
 Identities = 95/95 (100%)
 Strand = Plus / Plus

Query: 3566   aggtggtagaatttgatcggccggaggtactgcggaagaagcctgggtcattgttcgcag 3625
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 90397 aggtggtagaatttgatcggccggaggtactgcggaagaagcctgggtcattgttcgcag 90456

Query: 3626   ccctcatggccacagccacttcttcactgagataa 3660
              |||||||||||||||||||||||||||||||||||
Sbjct: 90457 ccctcatggccacagccacttcttcactgagataa 90491

 Score = 182 bits (92), Expect = 1e-42
 Identities = 92/92 (100%)
 Strand = Plus / Plus

Query: 2768   agctggcgtccagcttccaggccactgcccggattggcttggagacagaggcacagttca 2827
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 79077 agctggcgtccagcttccaggccactgcccggattggcttggagacagaggcacagttca 79136

Query: 2828   cggctgtagagaggatactgcagtacatgaag 2859
              ||||||||||||||||||||||||||||||||
Sbjct: 79137 cggctgtagagaggatactgcagtacatgaag 79168

 Score = 161 bits (81), Expect = 4e-36
 Identities = 81/81 (100%)
 Strand = Plus / Plus

Query: 3208   agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 3267
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 86796 agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 86855

Query: 3268   aggacattcctgaccaaggcc 3288
              |||||||||||||||||||||
Sbjct: 86856 aggacattcctgaccaaggcc 86876

 Score = 147 bits (74), Expect = 6e-32
 Identities = 74/74 (100%)
 Strand = Plus / Plus

```
Query: 1805   gatacctccaggtgctccactgctgctccctgaatcgggacctggaacttctgccctttg 1864
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 54466  gatacctccaggtgctccactgctgctccctgaatcgggacctggaacttctgccctttg 54525


Query: 1865   gagacatgacagag 1878
              ||||||||||||||
Sbjct: 54526  gagacatgacagag 54539



 Score =  147 bits (74), Expect = 6e-32
 Identities = 74/74 (100%)
 Strand = Plus / Plus


Query: 1607   aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 1666
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 49269  aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 49328


Query: 1667   ccatcctggaggag 1680
              ||||||||||||||
Sbjct: 49329  ccatcctggaggag 49342



>AC096996.1.1.194627
          Length = 194627

 Score =  454 bits (229), Expect = e-124
 Identities = 229/229 (100%)
 Strand = Plus / Minus


Query: 2217   ggttttccgctgccccatgagtttctttgacaccatcccaataggccggcttttgaactg 2276
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 173330 ggttttccgctgccccatgagtttctttgacaccatcccaataggccggcttttgaactg 173271


Query: 2277   cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct 2336
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 173270 cttcgcaggggacttggaacagctggaccagctcttgcccatcttttcagagcagttcct 173211


Query: 2337   ggtcctgtccttaatggtgatcgccgtcctgttgattgtcagtgtgctgtctccatatat 2396
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 173210 ggtcctgtccttaatggtgatcgccgtcctgttgattgtcagtgtgctgtctccatatat 173151


Query: 2397   cctgttaatgggagccataatcatggttatttgcttcatttattatatg 2445
              |||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 173150 cctgttaatgggagccataatcatggttatttgcttcatttattatatg 173102



 Score =  408 bits (206), Expect = e-110
 Identities = 206/206 (100%)
 Strand = Plus / Minus


Query: 1877   agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 1936
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 186382 agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 186323


Query: 1937   gcgccgtctattccgaccgtcagatctacctgctggacgaccccctgtctgctgtggacg 1996
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Sbjct: 186322  gcgccgtctattccgaccgtcagatctacctgctggacgaccccctgtctgctgtggacg  186263


Query: 1997  cccacgtggggaagcacatttttgaggagtgcattaagaagacactcaggggggaagacgg  2056
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 186262  cccacgtggggaagcacatttttgaggagtgcattaagaagacactcagggggaagacgg  186203


Query: 2057  tcgtcctggtgacccaccagctgcag  2082
             ||||||||||||||||||||||||||
Sbjct: 186202  tcgtcctggtgacccaccagctgcag  186177



 Score =  385 bits (194), Expect = e-103
 Identities = 194/194 (100%)
 Strand = Plus / Minus


Query: 2857  aagatgtgtgtctcggaagctcctttacacatggaaggcacaagttgtccccagggggtgg  2916
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 163018  aagatgtgtgtctcggaagctcctttacacatggaaggcacaagttgtccccagggggtgg  162959


Query: 2917  ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc  2976
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 162958  ccacagcatggggaaatcatatttcaggattatcacatgaaatacagagacaacacaccc  162899


Query: 2977  accgtgcttcacggcatcaacctgaccatccgcggccacgaagtggtgggcatcgtggga  3036
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 162898  accgtgcttcacggcatcaacctgaccatccgcggccacgaagtggtgggcatcgtggga  162839


Query: 3037  aggacgggctctgg  3050
             ||||||||||||||
Sbjct: 162838  aggacgggctctgg  162825



 Score =  371 bits (187), Expect = 2e-99
 Identities = 187/187 (100%)
 Strand = Plus / Minus


Query: 2583  gtttaagaggctgactgatgcgcagaataactacctgctgttgtttctatcttccacacg  2642
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 170528  gtttaagaggctgactgatgcgcagaataactacctgctgttgtttctatcttccacacg  170469


Query: 2643  atggatggcattgaggctggagatcatgaccaaccttgtgaccttggctgttgccctgtt  2702
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 170468  atggatggcattgaggctggagatcatgaccaaccttgtgaccttggctgttgccctgtt  170409


Query: 2703  cgtggcttttggcatttcctccaccccctactcctttaaagtcatggctgtcaacatcgt  2762
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 170408  cgtggcttttggcatttcctccaccccctactcctttaaagtcatggctgtcaacatcgt  170349


Query: 2763  gctgcag  2769
             |||||||
Sbjct: 170348  gctgcag  170342



 Score =  337 bits (170), Expect = 3e-89
 Identities = 170/170 (100%)
```

```
Query: 3401      agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 3460
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 153564    agatcatccttatcgatgaagccacagcctccattgacatggagacagacaccctgatcc 153505


Query: 3461      agcgcacaatccgtgaagccttccagggctgcaccgtgctcgtcattgcccaccgtgtca 3520
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 153504    agcgcacaatccgtgaagccttccagggctgcaccgtgctcgtcattgcccaccgtgtca 153445


Query: 3521      ccactgtgctgaactgtgaccacatcctggttatgggcaatgggaaggtg 3570
                 ||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 153444    ccactgtgctgaactgtgaccacatcctggttatgggcaatgggaaggtg 153395
```

 Score = 319 bits (161), Expect = 7e-84
 Identities = 161/161 (100%)
 Strand = Plus / Minus

```
Query: 3049      gggaagtcctccttgggcatggctctcttccgcctggtggagcccatggcaggccggatt 3108
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 161320    gggaagtcctccttgggcatggctctcttccgcctggtggagcccatggcaggccggatt 161261


Query: 3109      ctcattgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 3168
                 ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 161260    ctcattgacggcgtggacatttgcagcatcggcctggaggacttgcggtccaagctctca 161201


Query: 3169      gtgatccctcaagatccagtgctgctctcaggaaccatcag 3209
                 |||||||||||||||||||||||||||||||||||||||||
Sbjct: 161200    gtgatccctcaagatccagtgctgctctcaggaaccatcag 161160
```

 Score = 289 bits (146), Expect = 6e-75
 Identities = 188/202 (93%)
 Strand = Plus / Minus

```
Query: 1877      agattggagagcggggcctcaacctctctggggggcagaaacagaggatcagcctggccc 1936
                 ||||||| |||||||||||||||||||||||||||||||||  |||||||| ||||||||
Sbjct: 101522    agattggggagcggggcctcaacctctctggggggcagaggcagaggattagcctggccc 101463


Query: 1937      gcgccgtctattccgaccgtcagatctacctgctggacgaccccctgtctgctgtggacg 1996
                 |||| ||||||| ||||||||||||| |||||||||||||||||||||| ||  |||||||
Sbjct: 101462    gcgctgtctactccgaccgtcagctctacctgctggacgacccccctgtcggccgtggacg 101403


Query: 1997      cccacgtggggaagcacattttgaggagtgcattaagaagacactcaggggggaagacgg 2056
                 ||||||||||||||||||| | ||||||||||||||||||||| |||||||| ||||| |
Sbjct: 101402    cccacgtggggaagcacgtctttgaggagtgcattaagaagacgctcaggggaaagacag 101343


Query: 2057      tcgtcctggtgacccaccagct 2078
                 ||||||||||||||||||||||
Sbjct: 101342    tcgtcctggtgacccaccagct 101321
```

 Score = 278 bits (140), Expect = 2e-71
 Identities = 140/140 (100%)

```
Query: 2080    cagtacttagaattttgtggccagatcattttgttggaaaatgggaaaatctgtgaaaat 2139
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 184181  cagtacttagaattttgtggccagatcattttgttggaaaatgggaaaatctgtgaaaat 184122


Query: 2140    ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 2199
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 184121  ggaactcacagtgagttaatgcagaaaaaggggaaatatgcccaacttatccagaagatg 184062


Query: 2200    cacaaggaagccacttcggt 2219
               ||||||||||||||||||||
Sbjct: 184061  cacaaggaagccacttcggt 184042
```

 Score = 278 bits (140), Expect = 2e-71
 Identities = 140/140 (100%)
 Strand = Plus / Minus

```
Query: 2445    gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 2504
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 172992  gatgttcaagaaggccatcggtgtgttcaagagactggagaactatagccggtctccttt 172933


Query: 2505    attctcccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 2564
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 172932  attctcccacatcctcaattctctgcaaggcctgagctccatccatgtctatggaaaaac 172873


Query: 2565    tgaagacttcatcagccagt 2584
               ||||||||||||||||||||
Sbjct: 172872  tgaagacttcatcagccagt 172853
```

 Score = 252 bits (127), Expect = 1e-63
 Identities = 127/127 (100%)
 Strand = Plus / Minus

```
Query: 1679    agatgcacttgctcgagggctcggtgggggtgcagggaagcctggcctatgtcccccagc 1738
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 191439  agatgcacttgctcgagggctcggtgggggtgcagggaagcctggcctatgtcccccagc 191380


Query: 1739    aggcctggatcgtcagcgggaacatcagggagaacatcctcatgggaggcgcatatgaca 1798
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 191379  aggcctggatcgtcagcgggaacatcagggagaacatcctcatgggaggcgcatatgaca 191320


Query: 1799    aggcccg 1805
               |||||||
Sbjct: 191319  aggcccg 191313
```

 Score = 226 bits (114), Expect = 8e-56
 Identities = 114/114 (100%)
 Strand = Plus / Minus

```
Query: 3289    atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 3348
               ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
```

```
Sbjct: 156120 atctcaaagttccccaaaaagctgcatacagatgtggtggaaaacggtggaaacttctct 156061


Query:  3349    gtgggggagaggcagctgctctgcattgccagggctgtgcttcgcaactccaag 3402
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 156060 gtgggggagaggcagctgctctgcattgccagggctgtgcttcgcaactccaag 156007



  Score =  188 bits (95), Expect = 2e-44
  Identities = 95/95 (100%)
  Strand = Plus / Minus


Query:  3566    aggtggtagaatttgatcggccggaggtactgcggaagaagcctgggtcattgttcgcag 3625
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 153270 aggtggtagaatttgatcggccggaggtactgcggaagaagcctgggtcattgttcgcag 153211


Query:  3626    ccctcatggccacagccacttcttcactgagataa 3660
                |||||||||||||||||||||||||||||||||||
Sbjct: 153210 ccctcatggccacagccacttcttcactgagataa 153176



  Score =  182 bits (92), Expect = 1e-42
  Identities = 92/92 (100%)
  Strand = Plus / Minus


Query:  2768    agctggcgtccagcttccaggccactgcccggattggcttggagacagaggcacagttca 2827
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 164590 agctggcgtccagcttccaggccactgcccggattggcttggagacagaggcacagttca 164531


Query:  2828    cggctgtagagaggatactgcagtacatgaag 2859
                ||||||||||||||||||||||||||||||||
Sbjct: 164530 cggctgtagagaggatactgcagtacatgaag 164499



  Score =  161 bits (81), Expect = 4e-36
  Identities = 81/81 (100%)
  Strand = Plus / Minus


Query:  3208    agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 3267
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 156871 agattcaacctagatccctttgaccgtcacactgaccagcagatctgggatgccttggag 156812


Query:  3268    aggacattcctgaccaaggcc 3288
                |||||||||||||||||||||
Sbjct: 156811 aggacattcctgaccaaggcc 156791



  Score =  147 bits (74), Expect = 6e-32
  Identities = 74/74 (100%)
  Strand = Plus / Minus


Query:  1805    gatacctccaggtgctccactgctgctccctgaatcgggacctggaacttctgccctttg 1864
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 189201 gatacctccaggtgctccactgctgctccctgaatcgggacctggaacttctgccctttg 189142


Query:  1865    gagacatgacagag 1878
```

```
                        ||||||||||||||
Sbjct: 189141 gagacatgacagag 189128


 Score =  147 bits (74), Expect = 6e-32
 Identities = 74/74 (100%)
 Strand = Plus / Minus


Query: 1607   aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 1666
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Sbjct: 194398 aggggatgatgttaggggtctgcggcaacacggggagtggtaagagcagcctgttgtcag 194339


Query: 1667   ccatcctggaggag 1680
              ||||||||||||||
Sbjct: 194338 ccatcctggaggag 194325
```